Enhanced Surveillance for Antimicrobial Resistance Among Enteric Bacteria: FoodNet/Narms Retail Food Study

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Background: The food supply is an important source of enteric bacteria, including *Salmonella*, *Campylobacter*, *E. coli*, and possibly enterococci. Antimicrobial resistance among these foodborne bacteria is not uncommon and often is associated with the use of antimicrobial agents in food animals. Retail food represents a point of exposure close to the consumer and, when combined with data from slaughter plants and on-farm studies, provides a more representative picture of the prevalence of resistance in foodborne pathogens.

Program Description: The FoodNet / NARMS Retail Food Study is a collaborative effort between CDC, five FoodNet sites (Connecticut, Georgia, Maryland, Minnesota and Tennessee) and the U.S. Food and Drug Administration (FDA). Each site visits at least one different grocery store per month and purchases 10 samples each of chicken breasts, pork chops, ground turkey, and ground beef. Bacterial isolation is conducted at the state public health laboratories using procedures adapted from the FDA's Bacteriological Analytical Manual. Isolates are forwarded to FDA for antimicrobial susceptibility testing.

Conclusion: The research findings from this surveillance project will generate baseline data on antimicrobial susceptibility patterns of foodborne *Salmonella*, *Campylobacter*, *E. coli* and enterococci. Additionally, this research will lead to both an expansion of the NARMS program and an enhanced understanding of the prevalence of antimicrobial-resistant bacteria in retail food.

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